

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
15 September 2005 (15.09.2005)

PCT

(10) International Publication Number
WO 2005/084535 A1

(51) International Patent Classification⁷:

A61B 5/021

(21) International Application Number:

PCT/AU2005/000310

(22) International Filing Date: 4 March 2005 (04.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2004901160 5 March 2004 (05.03.2004) AU

(71) Applicant and

(72) Inventor: O'ROURKE, Michael, Francis [AU/AU]; Suite 810, St Vincent's Clinic, 438 Victoria Street, DARLINGHURST, New South Wales 2010 (AU).

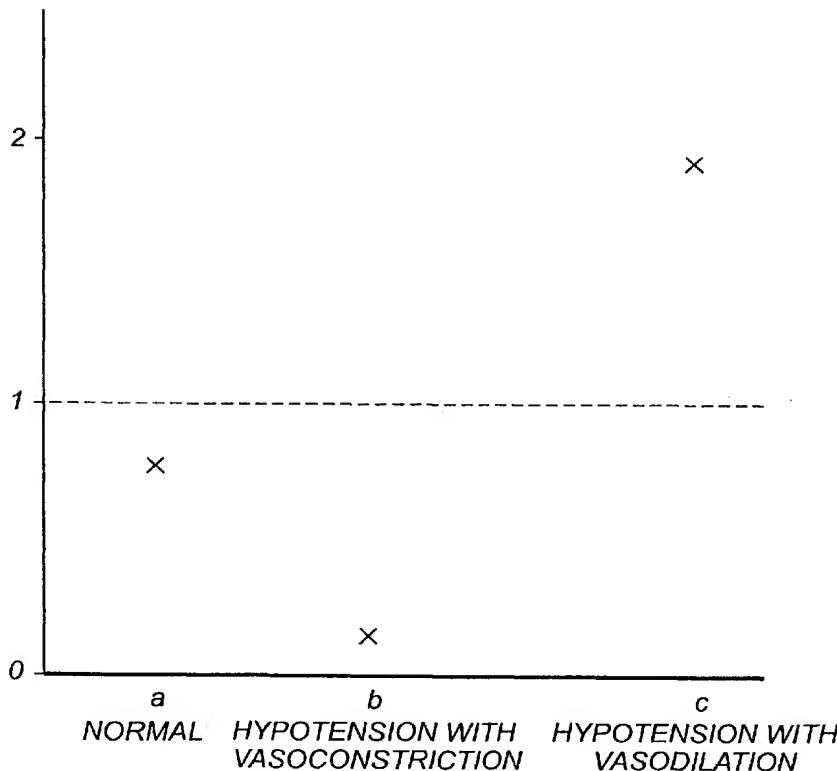
(74) Agent: MAXWELL, Peter; Peter Maxwell & Associates, Level 6, 60 Pitt Street, Sydney, New South Wales 2000 (AU).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: METHODS OF DISTINGUISHING BETWEEN VASOCONSTRICTION AND VASODILATION AS A CAUSE OF HYPOTENSION



(57) Abstract: The present invention relates to the use of the arterial pressure waveform recorded invasively or non-invasively, to distinguish between compensatory vasoconstriction with low cardiac output on the one hand from vasodilation from more severe organ damage on the other, as a cause of hypotension in acute emergencies. The waveforms may be subjected to harmonic analysis and the moduli of their harmonic components compared whereby a hypotensive individual can be confirmed to have the higher (second and above) greater than the first harmonic is considered as having vasoconstriction as a cause of hypotension.

WO 2005/084535 A1



Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.